Claims

- [c1] 1. A method of simultaneously tracing a plurality of telecommunications circuits from one or more first locations to one or more second locations, comprising the steps of:
 - (a) regenerating multiple pre-recorded speech signals;
 - (b) selectively applying said speech signals at said first locations to said second location comprising the steps of:
 - (i) reading a serial data stream from a speech read only memory, wherein said speech read only memory is formatted and arranged to store and output all vocabulary for the distinct block identification and distinct wire pair identification segments of speech;
 - (ii) retrieving one of said block identification speech segments from said speech read only memory;
 - (iii) converting said one of said speech segments to an analog output representative of said one of said speech segments;
 - (iv) routing said analog output to a telecommunications circuit;
 - (v) retrieving one of said pair identification speech segments from said speech read only memory; (vi) convert-

ing said one of said speech segments to an analog output representative of said one of said speech segments; and (iv) routing said analog output to a telecommunications circuit;

wherein each of said telecommunication circuits receives two segments of said speech signal such that one segment is common all others in a group and a second segment that differs from the second segment of said speech signal applied to any other of said telecommunication circuit;

- (c) detecting at said second location, said segments of said speech signal applied to each said telecommunication circuit.
- [Claim Reference]2. The method of claim 1 wherein said synthesized speech signal is converted from a digital signal to an analog signal prior to being applied to said each telecommunications circuit to be mapped.
- [Claim Reference]3. The method of claim 1 wherein said synthesized speech is in the form of a serial stream of individual bits.
- [c4] [Claim Reference]4. The method of claim 1, wherein said speech read only memory stores digitized vocabulary in a bit interleaved format.

- [Claim Reference]5. The method of claim 1, wherein step (b) (ii) comprises scanning said speech read only memory sequentially for the common block identification speech segment thereby outputting said speech segment to all channels in said block.
- [Claim Reference]6. The method of claim 1, wherein a selector switch provides a means for the user to select which group identity is preferred.
- [c7] [Claim Reference]7. The method of claim 1, wherein step (b)(v) comprises scanning said speech read only memory sequentially for the pair identification thereby outputting said unique speech segments.
- [08] [Claim Reference]8. The apparatus of claim 1 wherein said control means includes a clock source and bit counter.
- [09] 9. An apparatus for simultaneously tracing a plurality of telecommunications circuits from one or more first locations to a second location comprising: a means for re-creating distinct segments of speech to be applied to one or more of said plurality of telecommunications circuits to be traced, comprising: a speech read only memory being formatted and arranged to store and output said segments of speech for

each group and output said segments of speech for each individual channel;

a retrieving means for retrieving said speech segment from said memory location of said speech read only memory;

a switching means for selectively connecting and disconnecting said segments of speech to said one or more of said plurality of telecommunications circuits to be mapped; and

a control means for controlling the output of said segments of said speech through said switching means; and a bulk connecting means for applying said telecommunications circuits to a bulk telecommunications connector; and

a control means for selecting a group identity.